



FIRST SUPPLEMENT

—TO THE—

FLORA OF JACKSON COUNTY, MISSOURI.

—BY—

FRANK BUSH & CAMERON MANN.



In December, 1882, Mr. Frank Bush published a Report on the Flora of Jackson County, Missouri, which was the first catalogue ever given of the plants of this region.

It was necessarily incomplete, and known to be so, but it covered six hundred and nine species.

Some mistakes, of course, occurred, which are corrected in this supplement, but they are remarkably few considering that Mr. Bush had no access to a Botanical library or well arranged herbarium.

During 1883 and 1884, Mr. Bush continued to observe and collect, so far as his business afforded the leisure. In the spring of 1883 the present writer, for whom a botanizing stroll is a great relaxation from the cares of a laborious profession, met Mr. Bush, and since that time we have botanized occasionally together, and have frequently compared notes.

We are now able to report two hundred and ninety-seven additional species as growing in this region, making a total of nine hundred and six observed so far. That others will be found we are confident. Much of the ground is still unexplored; neither of us has been able to do more than snatch an occasional day for

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botanical work; and there are no other persons engaged in the same study within our borders, whose observations might eke out our own.

Our opinion is, that when Jackson County has been thoroughly examined in all its parts, and during several seasons, the number of species will not fall short of one thousand.

We have noted that many plants in this region vary considerably from the types as given in the manuals, not enough, perhaps, to establish distinct varieties, but sufficiently to often make the determination difficult. For instance, *Delphinium tricornis*, described by Gray, Wood and Chapman as being from 6 to 12 inches high, and having a few flowered raceme, occurs here often 2 feet high, and commonly with from 20 to 60 blossoms. *Delphinium azureum* has always white blossoms. *Aesculus glabra* has 7 leaflets as frequently as 5. *Rudbeckia hirta* has disks of same diameter varying $\frac{1}{4}$ to $\frac{1}{2}$ inch in length. *Oenothera sinuata* has leaves varying from entire to pinnatifid, and passes through all grades of size, etc., between the typical species and variety minima. *Tradescantia* has forms as to which it is hard to tell whether they are *Virginica* or *pilosa*. The list might be much extended.

The fact seems to be that the text book descriptions have often been drawn up from specimens a little one side of the named specific type, and that our plants are a little the other side, and so a noticeable discrepancy appears. The Western and South-Western Missouri plants have received less attention from leading Botanists than those of most other regions in the United States. If our little publication shall at all increase the knowledge of them, it will be as much as we desire.

It only remains to say that in the determination of the Cyperaceæ and Gramineæ, which have been collected solely by Mr. Bush, he has had the important assistance of Dr. George Vasey and Mr. L. H. Bailey, jr., to one or both of whom all the more difficult specimens were submitted; that all the specimens of *Salix* have been examined by Prof. M. S. Bebb; that all doubtful members of the *Solidago* and *Aster* families have been inspected by the late Dr. George Engelmann and Prof. F. L. Harvey; and finally that in all other cases of doubt the plant has been referred to Prof. Asa Gray, who has always shown the greatest courtesy and given the most valuable instructions; to him and to the other distinguished Botanists above named, the heartiest thanks are extended.

CAMERON MANN.

KANSAS CITY, MO., Feb. 10, 1885.

ADDITIONS TO FLORA OF JACKSON COUNTY.

- 610 *Anemone decapetala*, L. Prairies and hills. Rare.
- 611 *Ranunculus sceleratus*, L. Sandy bottoms.
- 612 *R. aquatilis*, L., var. *stagnatilis*, DC. Sloughs along Little Blue.
- 613 *Corydalis aurea*, Willd. Rocky places on prairies.
- 614 *Nasturtium OFFICINALE*, R. Br. Adventive near Kansas City.
- 615 *N. ARMORACIA*, Fries. Waste grounds near dwellings.
- 616 *N. limosum*, Nutt. Sandy bottoms; common.
- 617 *N. palustre*, DC. Common in Rush Bottom.
- 618 *N. palustre*, DC. var. *hispidum*, Fisch. & Mey. Ponds; rare.
- 619 *Cardamine hirsuta*, L. var. *sylvatica*, Gray. Dry soil near Little Blue.
- 620 *Draba Caroliniana*, Walt. Dry hill east of Independence.
- 621 *Brassica RAPA*, L. Cultivated fields.
- 622 *B. CAMPESTRIS*, L. Very common in oat fields.
- 623 *Lepidium RUDERALE*, L. Dry ground; very common.
- 624 *L. intermedium*, Gray. Frequent in dry rocky soil.
- 625 *Cleome integrifolia*, T. & G. Missouri bottoms east of Kansas City.
- 626 *Polanisia graveolens*, Raf. Occasional near Lees Summit.
- 627 *Viola cucullata*, Ait. var. *palmata*, Gray. Dry rocky ground near Lees Summit.
- 628 *V. cucullata*, Ait. var. *cordata*, Gray. Common in meadows.
- 629 *V. delphinifolia*, Nutt. Moist prairies near Lees Summit.
- 630 *Polygala incarnata*, L. Prairies; abundant in spots.
- 631 *P. verticillata*, L. Dry rocky hills; occasional.
- 632 *Hypericum mutilum*, L. Low ground near Grain Valley.
- 633 *H. sphaerocarpum*, Mx. Near Lake City; occasional.
- 634 *Arenaria lateriflora*, L. Rocky banks near Lees Summit.
- 635 *Anychia dichotoma*, Mx. var. *capillacea*, Torr. Dry wooded hills.
- 636 *Linum sulcatum*, Riddell. Prairies; Occasional.
- 637 *Vitis aestivalis*, Mx. var. (?) *cinerea*, Engelm. Bottoms along the Missouri.
- 638 *Acer saccharinum*, Wangenh. var. *nigrum*, T. & G. Common.
- 639 *Rhus Toxicodendron*, L. var. *radicans*, Torr. Abundant along streams.
- 640 *Baptisia leucophæa*, Nutt. Prairies; frequent.
- 641 *Trifolium repens*, L. Roadsides and meadows; common.
- 642 *Psoralea tenuiflora*, Pursh. Dry rocky ground on prairies.
- 643 *Dalea alopecuroides*, Willd. Sandy bottoms; common.
- 644 *Astragalus distortus*, T. & G. Prairies; frequent.
- 645 *A. caryocarpus*, Ker. Prairies.
- 646 *Desmodium pauciflorum*, DC. Near Kansas City.
- 647 *D. nudiflorum*, DC. Common along shaded ravines.
- 648 *D. cuspidatum*, Hook. Thickets and copses; occasional.
- 649 *D. Illinoense*, DC. Prairies near Lees Summit.
- 650 *D. Candense*, DC. Common in woods.
- 651 *D. rigidum*, DC. Occasional.
- 652 *Melilotus OFFICINALIS*, Willd. Roadsides and meadows.
- 653 *Lespedeza reticulata*, Pers. Dry hills along Little Blue.
- 654 *Phaseolus helvolus*, L. Bottoms along the Missouri.
- 655 *P. pauciflorus*, Benth. Sandy ridges along Little Blue.
- 656 *Spiræa salicifolia*, L. Low grounds near Lake City.
- 657 *Rubus villosus*, Ait. var. *frondosus*, Torr. Common in thickets.
- 658 *Potentilla rivalis*, Nutt. Sandy bottoms.
- 659 *P. rivalis*, Nutt. var. *pentandra*, Watson. Rush Bottom.
- 660 *P. rivalis*, Nutt. var. *millegrana*, Watson. Rush Bottom.
- 661 *Rosa nitida*, Willd. Rocky hills; scarce.
- 662 *Ammannia humilis*, Mx. Wet places; common.
- 663 *Epilobium coloratum*, Muhl. Along the Sni-a-bar creek.
- 664 *Ludwigia alata*, Ell. Low ground near Lake City.
- 665 *L. polycarpa*, Short & Peter. Low ground near Lake City.
- 666 *Gaura parviflora*, Dougl. Frequent.
- 667 *Oenothera speciosa*, Nutt. Wet prairies near Lees Summit. Abundant there.
- 668 *O. sinuata*, L. Sandy bottoms and clay banks.
- 669 *O. sinuata*, L. var. *minima*, Nutt.

- Abundant on clay bluffs west of Kansas City.
- 670 *Mentzelia oligosperma*, Nutt. Rocky banks; abundant in spots.
- 671 *Stem. cicutefolium*, Gmel. Low grounds near Lake City.
- 672 *Pimpinella integerrima*, Benth. & Hook. Frequent on prairies.
- 673 *Cherophyllum Taintieri*, Hook. Near Lees Summit.
- 674 *Archangelica atropurpurea*, Hoffm. Barrens; frequent.
- 675 *Peucedanum fœniculaceum*, Nutt. Frequent on prairies.
- 676 *Aralia quinquefolia*, Dec. & Planch. Woods; very rare.
- 677 *Cornus sericea*, L. Along streams; frequent.
- 678 *C. asperifolia*, Mx. Frequent.
- 679 *Lonicera flava*, Sims.? Along Cedar creek; rare.
- 680 *Valerianella tenocarpa*, Krok. Rocky hill north of Lees Summit.
- 681 *Vernonia altissima*, Nutt. Common in pastures.
- 682 *V. noveboracensis*, Willd. var. *latifolia*, Gray. Abundant.
- 683 *Eupatorium serotinum*, Michx. Woods; common.
- 684 *Liatris spicata*, Willd. Lees Summit; scarce.
- 685 *Solidago speciosa*, Nutt. var. *rigidiuscula*, T. & G. Prairies; frequent.
- 686 *S. radula*, Nutt. Copes and prairies.
- 687 *S. nemoralis*, Ait. Common on prairies.
- 688 *S. tenuifolia*, Pursh. Prairies; frequent.
- 689 *Aster sericeus*, Vent. Prairies south west of Lees Summit.
- 690 *A. turbinellus*, Lindl. Wooded hills; scarce.
- 691 *A. Tradescanti*, L. Dry banks; rare.
- 692 *A. salicifolius*, (Lam?) Ait. Occasional on prairies.
- 693 *Erigeron divaricatus*, Michx. Fields and roadsides.
- 694 *Polymnia Canadensis*, L. var. *radiata*, Gray. Large patches on rocky bluffs at Kansas City.
- 695 *Ambrosia trifida*, L. var. *integrifolia*, T. & G. Common.
- 696 *Xanthium Canadense*, Mill. Common everywhere.
- 697 *X. Canadense*, Mill. var. *echinatum*, Gray. Sandy bottoms.
- 698 *Iva ciliata*, Willd. Low prairies; common.
- 699 *I. xanthiifolia*, Nutt. Waste grounds at Kansas City.
- 700 *Echinacea purpurea*, Moench. Hill near Sui a-bar creek; rare.
- 701 *Helianthus hirsutus*, Raf. Dry sterile ground; common.
- 702 *H. petiolaris*, Nutt. Sandy ridges in Rush Bottom.
- 703 *H. dogonicoides*, Lam. Along streams; frequent.
- 704 *Verbesina helianthoides*, Michx. Copes near Westport.
- 705 *Coreopsis palmata*, Nutt. Common on prairies.
- 706 *C. involuerata*, Nutt. Moist soil; abundant.
- 707 *Helenium tenuifolium*, Nutt. Low grounds; scarce.
- 708 *Artemisia ANNUA*, L. Streets of Independence.
- 709 *A. dracunculoides*, Ph. Rocky ridge just north of Lees Summit.
- 710 *A. VULGARIS*, L. Sandy ridges through Rush Bottom.
- 711 *Senecio aureus*, L. var. *Balsamitæ*, T. & G. Prairies near Greenwood.
- 712 *Cnicus altissimus*, Willd. var. *discolor*, Gray. Old fields; very common.
- 713 *Hieracium longipilum*, Torr. Occasional on prairies.
- 714 *Troximon cuspidatum*, Pursh. Rocky bank near Lees Summit.
- 715 *Lactuca SCARIOLA*, L. Adventive along railroads.
- 716 *Lobelia cardinalis*, L. Along the Sui a-bar creek; rather frequent there.
- 717 *Monotropa uniflora*, L. Woods; scarce.
- 718 *Steironema lanceolatum*, Gray, var. *hybridum*, Gray. Blue Bottom.
- 719 *Fraxinus viridis*, Michx. f. Common in Rush Bottom.
- 720 *F. pubescens*, Lam. Low ground through Blue Bottom.
- 721 *Apocynum androsæmifolium*, L. Dry banks along Little Blue.
- 722 *Asclepiodora viridis*, Gray. Prairies near Lees Summit; rare.
- 723 *Asclepias obtusifolia*, Michx. Prairies; occasional.
- 724 *Acerates longifolia*, Ell. Common on prairies.
- 725 *A. viridiflora*, Ell. Prairies; frequent.
- 726 *A. viridiflora*, Ell. var. *lanceolata*, Gray. Prairies near Buckner.
- 727 *A. viridiflora*, Ell. var. *linearis*, Gray. Prairies near Buckner; rare.
- 728 *Phlox glaberrima*, L. Prairies; rare.
- 729 *P. divaricata*, L. Woods; very common.
- 730 *Polemonium reptans*, L. One clump found near Westport.
- 731 *Cynoglossum Virginicum*, L. Roadsides.
- 732 *Lithospermum latifolium*, Mx. Rocky woods; rare.
- 733 *L. angustifolium*, Michx. Prairies; occasional.
- 734 *Onosmodium Virginianum*, DC. Barrens. West of Lees Summit.

- 735 *O. Carolinianum*, DC. var. *molle*, Gray. Barrens west of Lees Summit.
- 736 *Echium VULGARE*, L. Adventive along railroads; rare.
- 737 *Ipomœa lacunosa*, L. Low ground in Blue Bottom.
- 738 *Cuscuta chlorocarpa*, Engelm. Low ground in bottoms.
- 739 *Veronica Anagallis*, L. Sloughs along Little Blue.
- 740 *Gerardia tenuifolia*, Vahl. Low ground near Grain Valley.
- 741 *G. tenuifolia*, Vahl. var. *macrophylla*, Benth. Common.
- 742 *G. purpurea*, L. Low ground on prairies.
- 743 *Ruellia strepens*, L. Rather common.
- 744 *Dianthera Americana*, L. Along Cedar creek.
- 745 *Melissa OFFICINALIS*, L. Along roadsides.
- 746 *Stachys cordata*, Riddell. Moist open woods.
- 747 *S. palustris*, L. Low marshy ground.
- 748 *Plantago pusilla*, Nutt. Prairies south of Lees Summit.
- 749 *P. cordata*, Lam. Along brooks; rare.
- 750 *P. Patagonica*, Jacq. var. *gnaphalioides*, Gray. Near Wayne City in dry ground.
- 751 *Plantago LANCEOLATA*, L. Near dwellings.
- 752 *Oxybaphus nyctagineus*, Sweet. Frequent north of Lees Summit.
- 753 *O. angustifolius*, Sweet. Dry banks and prairies; occasional.
- 754 *O. hirsutus*, Sweet. Southwest of Lees Summit; scarce.
- 755 *Cycloloma platyphyllum*, Moquin. Sandy shores of the Missouri.
- 756 *Chenopodium URBICUM*, L. Streets of Kansas City.
- 757 *C. Boscianum*, Moq. Common.
- 758 *C. Berlandieri*, Moq. Woods and fields.
- 759 *Amarantus blitoides*, Watson. Common in waste ground.
- 760 *Acnida tuberculata*, Moquin-Tandon. Sandy bottoms.
- 761 *Polygonum CONVULVULUS*, L. Common.
- 762 *P. ramosissimum*, Michx. Common in wet places.
- 763 *Rumex maritimus*, L. Low sloughs in Rush Bottom.
- 764 *R. obtusifolius*, L. Common in waste places.
- 765 *Comandra umbellata*, Nutt. Occasional on prairies and hills.
- 766 *Ceratophyllum demersum*, L. Sloughs along Little Blue.
- 767 *Callitriche verna*, L. Ponds and shallow lakes.
- 768 *Euphorbia Geyeri*, Engelm. Sandy ground in Rush Bottom.
- 769 *E. serpens*, H. B. K. Alluvial ground.
- 770 *E. dictyosperma*, Fisch. & M. On a rocky hill north of Lees Summit.
- 771 *Ricinus COMMUNIS*, L. Adventive along railroads.
- 772 *Acalypha Virginica*, L. var. *gracilens*, Gray. Common in fields.
- 773 *Croton Texensis*, Mull. On the bluff north of Independence.
- 774 *Maclura aurantiaca*, Nutt. Adventive along streams.
- 775 *Boehmeria cylindrica*, Willd. Frequent in Rush Bottom.
- 776 *Quercus stellata*, Wang. Barrens west of Lees Summit.
- 777 *Q. tinctoria*, Bartram. Occasional in woods.
- 778 *Salix longifolia*, Muhl. Sandy bottoms.
- 779 *S. humilis*, Marshall. Barrens; rare.
- 780 *S. BABYLONICA*, Tourn. Commonly planted, but becoming adventive.
- 781 *S. amygdaloides*, Anders. Bottoms along the Missouri.
- 782 *Populus ALBA*, L. Is becoming adventive.
- 783 *P. DILATATA*, Ait. Adventive.
- 784 *Juniperus Virginiana*, L. Rocky bluffs on Cedar creek; scarce. First reported by Z. S. Ragan.
- 785 *Lemna paucicostata*, Hegelmaier. Sloughs; common.
- 786 *Speirodela polyrrhiza*, Schleid. Ponds and lakes.
- 787 *Potamogeton natans*, L. In Hiffner's lake, Blue Bottom.
- 788 *P. pusillus*, L. Hiffner's lake; rare.
- 789 *Sagittaria heterophylla*, Pursh. Near Lake City.
- 790 *Anacharis Canadensis*, Planchon. Sloughs along Little Blue.
- 791 *Habenaria leucophæa*, Gray. Frequent on prairies.
- 792 *Spiranthes cernua*, Richard. Hazel thickets; rare.
- 793 *S* —, Nutt. Prairies and copses; rare.
- 794 *S. gracilis*, Big. Hazel copses; frequent.
- 795 *Smilax herbacea*, L. var. *pulverulenta*, Gray. Common.
- 796 *Melanthium Virginicum*, L. Wet prairies; frequent.
- 797 *Allium striatum*, Jacq. Prairies; frequent.
- 798 *A. mutabile*, Michx. Prairies; common.
- 799 *A. reticulatum*, Fraser. Rocky ledges; common.
- 800 *Lilium superbum*, L. var. *Carolinianum*, Chapm. Prairies.

- 801 *Juncus acuminatus*, Mx. var. *debilis*, Engelm. Sandy bottoms.
- 802 *J. acuminatus*, Mx. var. *legitimus*, Engelm. Common in swamps.
- 803 *Pontederia cordata*, L. Lakes near Lake City.
- 804 *Tradescantia pilosa*, Lehm. Common on prairies.
- 805 *Cyperus strigosus*, L. Common.
- 806 *C. erythrorhizos*, Muhl. Sandy soil; common.
- 807 *C. Michauxianus*, Schult. Sandy banks of the Missouri.
- 808 *C. Engelmanni*, Steud. Sand bars in the Missouri.
- 809 *C. filiculmis*, Vahl. Rocky ground along Blue and Cedar creek.
- 810 *Kyllingia pumila*, Michx. Along brooks.
- 811 *Eleocharis palustris*, R. Br. Common.
- 812 *E. intermedia*, Schultes. Sandy soil.
- 813 *E. tenuis*, Schultes. Common on prairies.
- 814 *Scirpus lineatus*, Michx. Wet prairies.
- 815 *S. pungens*, Vahl. Frequent in Rush Bottom.
- 816 *S. fluviatilis*, Gray. Ponds near Lake City.
- 817 *S. Torreyi*, Olney. Ponds near Lake City.
- 818 *Fimbristylis autumnalis*. Sandy places in Rush Bottom; rare.
- 819 *F. spadicea*, Vahl. var. *castanea*, Gray. Prairies; rare.
- 820 *Scleria triglomerata*, Michx. Frequent on prairies.
- 821 *Carex Muhlenbergii*, Schk. Common.
- 822 *C. conjuncta*, Boott. Low grounds.
- 823 *C. stipata*, Muhl. Bottoms.
- 824 *C. rosea*, Schk. var. *minor*, Boott. Meadows.
- 825 *C. Rosea*, Schk. var. *radiata*, Dew. Pastures; scarce.
- 826 *C. sterilis*, Willd. Frequent on prairies.
- 827 *C. angustata*, Boott. Low grounds.
- 828 *C. echinata*, Murr. Hills; rare.
- 829 *C. aperta*, Boott. Streams.
- 830 *C. granularis*, Muhl. Common.
- 831 *C. tetanica*, Schk. Meadows; rare.
- 832 *C. Meadii*, Dew. Common on prairies.
- 833 *C. laxiflora*, Lam. var. *intermedia*, Boott. Rare.
- 834 *C. laxiflora*, Lam. var. *blanda*, Boott. Meadows; common.
- 835 *C. laxiflora*, Lam. var. *latifolia*, Boott. Wet rocks; rare.
- 836 *C. Hitchcockiana*, Dew. Dry banks.
- 837 *Carex Pennsylvanica*, Lam. High hills; common.
- 838 *C. striata*, Michx. Prairies.
- 839 *C. riparia*, Curtis. Sandy bottoms.
- 840 *C. acutiformis*, Ehrh. Sloughs; rare.
- 841 *C. Richardsonii*, R. Br. Common on prairies.
- 842 *C. trichocarpa*, Muhl. Wet places on prairies.
- 843 *Paspalum fluitans*, Walt. Sloughs along Sni-a-bar creek.
- 844 *P. setaceum*, Michx. Common in meadows.
- 845 *Panicum filiforme*, L. Prairies near Lees Summit.
- 846 *P. GLABRUM*, Gaud. Dry ground; common.
- 847 *P. proliferum*, Lam. Common.
- 848 *P. amarum*, Ell. Blue Bottom.
- 849 *P. depauperatum*, Muhl. Common in meadows.
- 850 *P. latifolium*, L. Moist open woods.
- 851 *P. clandestinum*, L. Woods; common.
- 852 *P. clandestinum*, L. var. *pedunculatum*, Torr. Common.
- 853 *P. viscidum*, Ell. Dense thickets in Rush Bottom.
- 854 *P. dichotomum*, L. Hills and meadows.
- 855 *P. microcarpum*, Muhl. var. *sphaerocarpon*, Vasey. Common.
- 856 *P. CRUS-GALLI*, L. var. *hispidum*, Vasey. Common.
- 857 *Phalaris aundinacea*, L. Low ground near Lake City.
- 858 *Alopecurus geniculatus*, L. var. *aristulatus*, Vasey. Common.
- 859 *Stipa spartea*, Trin. Prairies; frequent.
- 860 *Muhlenbergia sobolifera*, Trin. Rocky woods.
- 861 *M. sylvatica*, T. & G. Hills; occasional.
- 862 *M. Mexicana*, Trin. Woods; common.
- 863 *M. Mexicana*, Trin. var. *filiformis*, Vasey. Marshes.
- 864 *M. diffusa*, Schreb. Very common in meadows.
- 865 *Sporobolus heterolepis* Gr. Abundant on the prairies.
- 866 *Sporobolus cryptandrus*, Gray. Sandy bottoms.
- 867 *S. vaginæfflorus*, Torr. var. *tenera*, Vasey. Dry banks; common.
- 868 *Agrostis scabra*, Willd. Dry fields; common.
- 869 *A. perennans*, Tuck. Moist hillsides.
- 870 *Cinna arundinacea*, L. Woods and ravines; frequent.
- 871 *Deveuxia confinis*, Nutt. Low boggy places.
- 872 *D. Canadensis*, Beauv. Blue Bottom; rare.

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| 873 <i>Leptochloa mucronata</i> , Kth. Sandy bottoms; scarce. | 890 <i>P. TRIVIALIS</i> , L. Common along streams. |
| 874 <i>Diplachne fascicularis</i> , Beauv. Sloughs along Little Blue. | 891 <i>P. sylvestris</i> , Gray. Hills; scarce. |
| 875 <i>Phragmites communis</i> , Trin. Sloughs in Rush Bottom. | 892 <i>P. flexuosa</i> , Muhl. Rocky woods along Little Blue. |
| 876 <i>Koeleria cristata</i> , Pers. Abundant on prairies. | 893 <i>Glyceria nervata</i> , Trin. Along streams. |
| 877 <i>Eatonia obtusata</i> , Gray. Hills and fields. | 894 <i>Glyceria fluitans</i> , R. Br. Sloughs along Little Blue. |
| 878 <i>E. Pennsylvanica</i> , Gray. Common in woods. | 895 <i>Festuca nutans</i> , Willd. Rocky woods; common. |
| 879 <i>Eragrostis reptans</i> , Nees. Moist gravelly banks. | 896 <i>F. duriuscula</i> , L. Common on barrens. |
| 880 <i>E. POEIOIDES</i> , Beauv. Common in fields. | 897 <i>Bromus ciliatus</i> , L. var. <i>purgans</i> , Gray. Moist rocks. |
| 881 <i>E. POEIOIDES</i> , Beauv. var. <i>MEGASTACHYA</i> , Gray. Common in fields. | 898 <i>Agropyrum repens</i> , Beauv. Along railroads. |
| 882 <i>E. Frankii</i> , Meyer. Dry ground; common. | 899 <i>Hordeum pusillum</i> , Nutt. Common in dry ground. |
| 883 <i>E. Purshii</i> , Schrad. Common along roadsides. | 900 <i>H. jubatum</i> , L. Cultivated and becoming adventive. |
| 884 <i>E. capillaris</i> , L. Dry open woods. | 901 <i>Elymus Virginicus</i> , L. Rocky woods near Little Blue. |
| 885 <i>E. tenuis</i> , Gray. Sandy ridges in Rush Bottom. | 902 <i>E. Canadensis</i> , L. var. <i>glaucofolius</i> , Gray. Common. |
| 886 <i>E. pectinacea</i> , Mx. var. <i>spectabilis</i> , Gray. Rush Bottom. | 903 <i>Equisetum robustum</i> , Braun. var. <i>affine</i> , Engelm. Bottoms. |
| 887 <i>Poa annua</i> , L. Common in old fields. | 904 <i>Notholena dealbata</i> , Kunze. Frequent on limestone cliffs. |
| 888 <i>P. compressa</i> , L. Common. | 904 <i>Asplenium parvulum</i> , Mart. & Gal. Hazel thickets; rare. |
| 889 <i>P. serotina</i> , Ehrh. Common in meadows. | 905 <i>Azolla Caroliniana</i> , Willd. Abundant in Hiffner's lake. |

The following have been found within a mile or so of the borders of the county, and may therefore be reasonably supposed to occur in it.

Aphyllon uniflorum, Torr. & Gr.
Heuchera Americana, L.

Sabbatia stellaris, Pursh.
Dodecatheon Meadia, L.

Corrections of Flora of 1882.

- No. 4 should be *Thalictrum purpurascens*.
- No. 8 should be *Ranunculus recurvatus*.
- No. 43 should be *Viola sagittata*.
- No. 132 should be *Prunus serotina*.
- No. 164 should be omitted.
- No. 170 should be *Opuntia Rafinesquii*. This change is made on authority of Dr. Engelmann.
- No. 241 should be *Heliopsis lævis*, var. *scabra*.
- No. 272 should be omitted.
- No. 408 should be *Asclepias Sullivantii*.
- No. 428 should be *Amarantus blitoides*.
- No. 540 should be *Scirpus lineatus*.

Elliot

FIRST SUPPLEMENT

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—BY—

FRANK BUSH & CAMERON MANN.



In December, 1882, Mr. Frank Bush published a Report on the Flora of Jackson County, Missouri, which was the first catalogue ever given of the plants of this region.

It was necessarily incomplete, and known to be so, but it covered six hundred and nine species.

Some mistakes, of course, occurred, which are corrected in this supplement, but they are remarkably few considering that Mr. Bush had no access to a Botanical library or well arranged herbarium.

During 1883 and 1884, Mr. Bush continued to observe and collect, so far as his business afforded the leisure. In the spring of 1883 the present writer, for whom a botanizing stroll is a great relaxation from the cares of a laborious profession, met Mr. Bush, and since that time we have botanized occasionally together, and have frequently compared notes.

We are now able to report two hundred and ninety-seven additional species as growing in this region, making a total of nine hundred and six observed so far. That others will be found we are confident. Much of the ground is still unexplored: neither of us has been able to do more than snatch an occasional day for

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II ^{Suppl. 1} ADDITIONS TO FLORA OF JACKSON COUNTY, MISSOURI.

botanical work; and there are no other persons engaged in the same study within our borders, whose observations might eke out our own.

Our opinion is, that when Jackson County has been thoroughly examined in all its parts, and during several seasons, the number of species will not fall short of one thousand.

We have noted that many plants in this region vary considerably from the types as given in the manuals, not enough, perhaps, to establish distinct varieties, but sufficiently to often make the determination difficult. For instance, *Delphinium tricorne*, described by Gray, Wood and Chapman as being from 6 to 12 inches high, and having a few flowered raceme, occurs here often 2 feet high, and commonly with from 20 to 60 blossoms. *Delphinium azureum* has always white blossoms. *Æsculus glabra* has 7 leaflets as frequently as 5. *Rudbeckia hirta* has disks of same diameter varying $\frac{1}{4}$ to $\frac{1}{2}$ inch in length. *Oenothera sinuata* has leaves varying from entire to pinnatifid, and passes through all grades of size, etc., between the typical species and variety minima. *Tradescantia* has forms as to which it is hard to tell whether they are *Virginica* or *pilosa*. The list might be much extended.

The fact seems to be that the text book descriptions have often been drawn up from specimens a little one side of the named specific type, and that our plants are a little the other side, and so a noticeable discrepancy appears. The Western and South-Western Missouri plants have received less attention from leading Botanists than those of most other regions in the United States. If our little publication shall at all increase the knowledge of them, it will be as much as we desire.

It only remains to say that in the determination of the Cyperaceæ and Gramineæ, which have been collected solely by Mr. Bush, he has had the important assistance of Dr. George Vasey and Mr. L. H. Bailey, jr., to one or both of whom all the more difficult specimens were submitted; that all the specimens of *Salix* have been examined by Prof. M. S. Bebb; that all doubtful members of the *Solidago* and *Aster* families have been inspected by the late Dr. George Engelmann and Prof. F. L. Harvey; and finally, that in all other cases of doubt the plant has been referred to Prof. Asa Gray, who has always shown the greatest courtesy and given the most valuable instructions; to him and to the other distinguished Botanists above named, the heartiest thanks are extended.

CAMERON MANN.

KANSAS CITY, Mo., Feb. 10, 1885.

ADDITIONS TO FLORA OF JACKSON COUNTY.

- 610 *Anemone decapetala*, L. Prairies and hills. Rare.
- 611 *Ranunculus sceleratus*, L. Sandy bottoms.
- 612 *R. aquatilis*, L., var. *stagnatilis*, DC. Sloughs along Little Blue.
- 613 *Corydalis aurea*, Willd. Rocky places on prairies.
- 614 *Nasturtium officinale*, R. Br. Adventive near Kansas City.
- 615 *N. ARMORACIA*, Fries. Waste grounds near dwellings.
- 616 *N. limosum*, Nutt. Sandy bottoms; common.
- 617 *N. palustre*, DC. Common in Rush Bottom.
- 618 *N. palustre*, DC. var. *hispidum*, Fisch. & Mey. Ponds; rare.
- 619 *Cardamine hirsuta*, L. var. *sylvatica*, Gray. Dry soil near Little Blue.
- 620 *Draba Caroliniana*, Walt. Dry hill east of Independence.
- 621 *Brassica RAPA*, L. Cultivated fields.
- 622 *B. CAMPESTRIS*, L. Very common in oat fields.
- 623 *Lepidium RUDERALE*, L. Dry ground; very common.
- 624 *L. intermedium*, Gray. Frequent in dry rocky soil.
- 625 *Cleome integrifolia*, T. & G. Missouri bottoms east of Kansas City.
- 626 *Polanisia graveolens*, Raf. Occasional near Lees Summit.
- 627 *Viola cucullata*, Ait. var. *palmata*, Gray. Dry rocky ground near Lees Summit.
- 628 *V. cucullata*, Ait. var. *cordata*, Gray. Common in meadows.
- 629 *V. delphinifolia*, Nutt. Moist prairies near Lees Summit.
- 630 *Polygala incarnata*, L. Prairies; abundant in spots.
- 631 *P. verticillata*, L. Dry rocky hills; occasional.
- 632 *Hypericum mutilum*, L. Low ground near Grain Valley.
- 633 *H. sphaerocarpum*, Mx. Near Lake City; occasional.
- 634 *Arenaria lateriflora*, L. Rocky banks near Lees Summit.
- 635 *Anychia dichotoma*, Mx. var. *capillacea*, Torr. Dry wooded hills.
- 636 *Linum sulcatum*, Riddell. Prairies; Occasional.
- 637 *Vitis aestivalis*, Mx. var. (?) *cinerea*, Engelm. Bottoms along the Missouri.
- 638 *Acer saccharinum*, Wangenh. var. *nigrum*, T. & G. Common.
- 639 *Rhus Toxicodendron*, L. var. *radicans*, Torr. Abundant along streams.
- 640 *Baptisia leucophaea*, Nutt. Prairies; frequent.
- 641 *Trifolium repens*, L. Roadsides and meadows; common.
- 642 *Psoralea tenuiflora*, Pursh. Dry rocky ground on prairies.
- 643 *Dalea alopecuroides*, Willd. Sandy bottoms; common.
- 644 *Astragalus distortus*, T. & G. Prairies; frequent.
- 645 *A. caryocarpus*, Ker. Prairies.
- 646 *Desmodium pauciflorum*, DC. Near Kansas City.
- 647 *D. nudiflorum*, DC. Common along shaded ravines.
- 648 *D. cuspidatum*, Hook. Thickets and copses; occasional.
- 649 *D. Illinoense*, DC. Prairies near Lees Summit.
- 650 *D. Candense*, DC. Common in woods.
- 651 *D. rigidum*, DC. Occasional.
- 652 *Melilotus OFFICINALIS*, Willd. Roadsides and meadows.
- 653 *Lespedeza reticulata*, Pers. Dry hills along Little Blue.
- 654 *Phaseolus helvolus*, L. Bottoms along the Missouri.
- 655 *P. pauciflorus*, Benth. Sandy ridges along Little Blue.
- 656 *Spiraea salicifolia*, L. Low grounds near Lake City.
- 657 *Rubus villosus*, Ait. var. *frondosus*, Torr. Common in thickets.
- 658 *Potentilla rivalis*, Nutt. Sandy bottoms.
- 659 *P. rivalis*, Nutt. var. *pentandra*, Watson. Rush Bottom.
- 660 *P. rivalis*, Nutt. var. *millegrana*, Watson. Rush Bottom.
- 661 *Rosa nitida*, Willd. Rocky hills; scarce.
- 662 *Ammannia humilis*, Mx. Wet places; common.
- 663 *Epilobium coloratum*, Muhl. Along the Sni-a-bar creek.
- 664 *Ludwigia alata*, Ell. Low ground near Lake City.
- 665 *L. polycarpa*, Short & Peter. Low ground near Lake City.
- 666 *Gaura parviflora*, Dougl. Frequent.
- 667 *Oenothera speciosa*, Nutt. Wet prairies near Lees Summit. Abundant there.
- 668 *O. sinuata*, L. Sandy bottoms and clay banks.
- 669 *O. sinuata*, L. var. *minima*, Nutt.

- Abundant on clay bluffs west of Kansas City.
- 670 *Mentzelia oligosperma*, Nutt. Rocky banks; abundant in spots.
- 671 *Sium cicutæfolium*, Gmel. Low grounds near Lake City.
- 672 *Pimpinella integrerrima*, Benth. & Hook. Frequent on prairies.
- 673 *Chærophyllum Tainturieri*, Hook. Near Lees Summit.
- 674 *Archangelica atropurpurea*, Hoffm. Barrens; frequent.
- 675 *Peucedanum feniculaceum*, Nutt. Frequent on prairies.
- 676 *Aralia quinquefolia*, Dec. & Planch. Woods; very rare.
- 677 *Cornus sericea*, L. Along streams; frequent.
- 678 *C. asperifolia*, Mx. Frequent.
- 679 *Lonicera flava*, Sims.? Along Cedar creek; rare.
- 680 *Valerianella tenocarpa*, Krok. Rocky hill north of Lees Summit.
- 681 *Vernonia altissima*, Nutt. Common in pastures.
- 682 *V. noveboracensis*, Willd. var. *latifolia*, Gray. Abundant.
- 683 *Eupatorium serotinum*, Michx. Woods; common.
- 684 *Liatris spicata*, Willd. Lees Summit; scarce.
- 685 *Solidago speciosa*, Nutt. var. *rigidiuscula*, T. & G. Prairies; frequent.
- 686 *S. radula*, Nutt. Copses and prairies.
- 687 *S. nemoralis*, Ait. Common on prairies.
- 688 *S. tenuifolia*, Pursh. Prairies; frequent.
- 689 *Aster sericeus*, Vent. Prairies south west of Lees Summit.
- 690 *A. turbinellus*, Lindl. Wooded hills; scarce.
- 691 *A. Tradescanti*, L. Dry banks; rare.
- 692 *A. salicifolius*, (Lam?) Ait. Occasional on prairies.
- 693 *Erigeron divaricatus*, Michx. Fields and roadsides.
- 694 *Polymnia Canadensis*, L. var. *radiata*, Gray. Large patches on rocky bluffs at Kansas City.
- 695 *Ambrosia trifida*, L. var. *integrifolia*, T. & G. Common.
- 696 *Xanthium Canadense*, Mill. Common everywhere.
- 697 *X. Canadense*, Mill. var. *echinatum*, Gray. Sandy bottoms.
- 698 *Iva ciliata*, Willd. Low prairies; common.
- 699 *I. xanthiifolia*, Nutt. Waste grounds at Kansas City.
- 700 *Echinacea purpurea*, Moench. Hill near Sni a-bar creek; rare.
- 701 *Helianthus hirsutus*, Raf. Dry sterile ground common.
- 702 *H. petiolaris*, Nutt. Sandy ridges in Rush Bottom.
- 703 *H. doronicoides*, Lam. Along streams; frequent.
- 704 *Verbesina helianthoides*, Michx. Copses near Westport.
- 705 *Coreopsis palmata*, Nutt. Common on prairies.
- 706 *C. involucrata*, Nutt. Moist soil; abundant.
- 707 *Helenium tenuifolium*, Nutt. Low grounds; scarce.
- 708 *Artemisia ANNUA*, L. Streets of Independence.
- 709 *A. dracunculoides*, Ph. Rocky ridge just north of Lees Summit.
- 710 *A. VULGARIS*, L. Sandy ridges through Rush Bottom.
- 711 *Senecio aureus*, L. var. *Balsamitæ*, T. & G. Prairies near Greenwood.
- 712 *Cnicus altissimus*, Willd. var. *discolor*, Gray. Old fields; very common.
- 713 *Hieracium longipilum*, Torr. Occasional on prairies.
- 714 *Troximon cuspidatum*, Pursh. Rocky bank near Lees Summit.
- 715 *Lactuca SCARIOLA*, L. Adventive along railroads.
- 716 *Lobelia cardinalis*, L. Along the Sni-a-bar creek; rather frequent there.
- 717 *Monotropa uniflora*, L. Woods; scarce.
- 718 *Steironema lanceolatum*, Gray, var. *hybridum*, Gray. Blue Bottom.
- 719 *Fraxinus viridis*, Michx. f. Common in Rush Bottom.
- 720 *F. pubescens*, Lam. Low ground through Blue Bottom.
- 721 *Apocynum androsæmifolium*, L. Dry banks along Little Blue.
- 722 *Asclepiodora viridis*, Gray. Prairies near Lees Summit; rare.
- 723 *Asclepias obtusifolia*, Michx. Prairies; occasional.
- 724 *Acerates longifolia*, Ell. Common on prairies.
- 725 *A. viridiflora*, Ell. Prairies; frequent.
- 726 *A. viridiflora*, Ell. var. *lanceolata*, Gray. Prairies near Buckner.
- 727 *A. viridiflora*, Ell. var. *linearis*, Gray. Prairies near Buckner; rare.
- 728 *Phlox glaberrima*, L. Prairies; rare.
- 729 *P. divaricata*, L. Woods; very common.
- 730 *Polemonium reptans*, L. One clump found near Westport.
- 731 *Cynoglossum Virginicum*, L. Roadsides.
- 732 *Lithospermum latifolium*, Mx. Rocky woods; rare.
- 733 *L. angustifolium*, Michx. Prairies; occasional.
- 734 *Onosmodium Virginianum*, DC. Barrens. West of Lees Summit.

- 735 *O. Carolinianum*, DC. var. *molle*, Gray. Barrens west of Lees Summit.
- 736 *Echium VULGARE*, L. Adventive along railroads; rare.
- 737 *Ipomœa lacunosa*, L. Low ground in Blue Bottom.
- 738 *Cuscuta chlorocarpa*, Engelm. Low ground in bottoms.
- 739 *Veronica Anagallis*, L. Sloughs along Little Blue.
- 740 *Gerardia tenuifolia*, Vahl. Low ground near Grain Valley.
- 741 *G. tenuifolia*, Vahl. var. *macrophylla*, Benth. Common.
- 742 *G. purpurea*, L. Low ground on prairies.
- 743 *Ruellia strepens*, L. Rather common.
- 744 *Dianthera Americana*, L. Along Cedar creek.
- 745 *Melissa OFFICINALIS*, L. Along roadsides.
- 746 *Stachys cordata*, Riddell. Moist open woods.
- 747 *S. palustris*, L. Low marshy ground.
- 748 *Plantago pusilla*, Nutt. Prairies south of Lees Summit.
- 749 *P. cordata*, Lam. Along brooks; rare.
- 750 *P. Patagonica*, Jacq. var. *gnaphaloides*, Gray. Near Wayne City in dry ground.
- 751 *Plantago LANCEOLATA*, L. Near dwellings.
- 752 *Oxybaphus nyctagineus*, Sweet. Frequent north of Lees Summit.
- 753 *O. angustifolius*, Sweet. Dry banks and prairies; occasional.
- 754 *O. hirsutus*, Sweet. Southwest of Lees Summit; scarce.
- 755 *Cycloloma platyphyllum*, Moquin. Sandy shores of the Missouri.
- 756 *Chenopodium URBICUM*, L. Streets of Kansas City.
- 757 *C. Boscianum*, Moq. Common.
- 758 *C. Berlandieri*, Moq. Woods and fields.
- 759 *Amarantus blitoides*, Watson. Common in waste ground.
- 760 *Acnida tuberculata*, Moquin-Tandon. Sandy bottoms.
- 761 *Polygonum CONVULVULUS*, L. Common.
- 762 *P. ramosissimum*, Michx. Common in wet places.
- 763 *Rumex maritimus*, L. Low sloughs in Rush Bottom.
- 764 *R. obtusifolius*, L. Common in waste places.
- 765 *Comandra umbellata*, Nutt. Occasional on prairies and hills.
- 766 *Ceratophyllum demersum*, L. Sloughs along Little Blue.
- 767 *Callitriche verna*, L. Ponds and shallow lakes
- 768 *Euphorbia Geyeri*, Engelm. Sandy ground in Rush Bottom.
- 769 *E. serpens*, H. B. K. Alluvial ground.
- 770 *E. dictyosperma*, Fisch. & M. On a rocky hill north of Lees Summit.
- 771 *Ricinus COMMUNIS*, L. Adventive along railroads.
- 772 *Acalypha Virginica*, L. var. *gracilens*, Gray. Common in fields.
- 773 *Croton Texensis*, Mull. On the bluff north of Independence.
- 774 *Maclura aurantiaca*, Nutt. Adventive along streams.
- 775 *Boehmeria cylindrica*, Willd. Frequent in Rush Bottom.
- 776 *Quercus stellata*, Wang. Barrens west of Lees Summit.
- 777 *Q. tinctoria*, Bartram. Occasional in woods.
- 778 *Salix longifolia*, Muhl. Sandy bottoms.
- 779 *S. humilis*, Marshall. Barrens; rare.
- 780 *S. BABYLONICA*, Tourn. Commonly planted, but becoming adventive.
- 781 *S. amygdaloides*, Anders. Bottoms along the Missouri.
- 782 *Populus ALBA*, L. Is becoming adventive.
- 783 *P. DILATATA*, Ait. Adventive.
- 784 *Juniperus Virginiana*, L. Rocky bluffs on Cedar creek; scarce. First reported by Z. S. Ragan.
- 785 *Lemna paucicostata*, Hegelmaier. Sloughs; common.
- 786 *Speirodela polyrhiza*, Schleid. Ponds and lakes.
- 787 *Potamogeton natans*, L. In Hiffner's lake, Blue Bottom.
- 788 *P. pusillus*, L. Hiffner's lake; rare.
- 789 *Sagittaria heterophylla*, Pursh. Near Lake City.
- 790 *Anacharis Canadensis*, Planchon. Sloughs along Little Blue.
- 791 *Habenaria leucophaea*, Gray. Frequent on prairies.
- 792 *Spiranthes cernua*, Richard. Hazel thickets; rare.
- 793 *S* —, Nutt. Prairies and copses; rare.
- 794 *S gracilis*, Big. Hazel copses; frequent.
- 795 *Smilax herbacea*, L. var. *pulverulenta*, Gray. Common.
- 796 *Melanthium Virginicum*, L. Wet prairies; frequent.
- 797 *Allium striatum*, Jacq. Prairies; frequent.
- 798 *A. mutabile*, Michx. Prairies; common.
- 799 *A. reticulatum*, Fraser. Rocky ledges; common.
- 800 *Lilium superbum*, L. var. *Carolinianum*, Chapm. Prairies.

- 801 *Juncus acuminatus*, Mx. var. *debilis*, Engelm. Sandy bottoms.
- 802 *J. acuminatus*, Mx. var. *legitimus*, Engelm. Common in swamps.
- 803 *Pontederia cordata*, L. Lakes near Lake City.
- 804 *Tradescantia pilosa*, Lehm. Common on prairies.
- 805 *Cyperus strigosus*, L. Common.
- 806 *C. erythrorhizos*, Muhl. Sandy soil; common.
- 807 *C. Michauxianus*, Schult. Sandy banks of the Missouri.
- 808 *C. Engelmanni*, Steud. Sand bars in the Missouri.
- 809 *C. filiculmis*, Vahl. Rocky ground along Blue and Cedar creek.
- 810 *Kyllingia pumila*, Michx. Along brooks.
- 811 *Eleocharis palustris*, R. Br. Common.
- 812 *E. intermedia*, Schultes. Sandy soil.
- 813 *E. tenuis*, Schultes. Common on prairies.
- 814 *Scirpus lineatus*, Michx. Wet prairies.
- 815 *S. pungens*, Vahl. Frequent in Rush Bottom.
- 816 *S. fluviatilis*, Gray. Ponds near Lake City.
- 817 *S. Torreyi*, Olney. Ponds near Lake City.
- 818 *Fimbristylis autumnalis*. Sandy places in Rush Bottom; rare.
- 819 *F. spadicea*, Vahl. var. *castanea*, Gray. Prairies; rare.
- 820 *Scleria triglomerata*, Michx. Frequent on prairies.
- 821 *Carex Muhlenbergii*, Schk. Common.
- 822 *C. conjuncta*, Boott. Low grounds.
- 823 *C. stipata*, Muhl. Bottoms.
- 824 *C. rosea*, Schk. var. *minor*, Boott. Meadows.
- 825 *C. Rosea*, Schk. var. *radiata*, Dew. Pastures; scarce.
- 826 *C. sterilis*, Willd. Frequent on prairies.
- 827 *C. angustata*, Boott. Low grounds.
- 828 *C. echinata*, Murr. Hills; rare.
- 829 *C. aperta*, Boott. Streams.
- 830 *C. granularis*, Muhl. Common.
- 831 *C. tetanica*, Schk. Meadows; rare.
- 832 *C. Meadii*, Dew. Common on prairies.
- 833 *C. laxiflora*, Lam. var. *intermedia*, Boott. Rare.
- 834 *C. laxiflora*, Lam. var. *blanda*, Boott. Meadows; common.
- 835 *C. laxiflora*, Lam. var. *latifolia*, Boott. Wet rocks; rare.
- 836 *C. Hitchcockiana*, Dew. Dry banks.
- 837 *Carex Pennsylvanica*, Lam. High hills; common.
- 838 *C. striata*, Michx. Prairies.
- 839 *C. riparia*, Curtis. Sandy bottoms.
- 840 *C. acutiformis*, Ehrh. Sloughs; rare.
- 841 *C. Richardsonii*, R. Br. Common on prairies.
- 842 *C. trichocarpa*, Muhl. Wet places on prairies.
- 843 *Paspalum fluitans*, Walt. Sloughs along Sni-a-bar creek.
- 844 *P. setaceum*, Michx. Common in meadows.
- 845 *Panicum filiforme*, L. Prairies near Lees Summit.
- 846 *P. GLABRUM*, Gaud. Dry ground; common.
- 847 *P. proliferum*, Lam. Common.
- 848 *P. amarum*, Ell. Blue Bottom.
- 849 *P. depauperatum*, Muhl. Common in meadows.
- 850 *P. latifolium*, L. Moist open woods.
- 851 *P. clandestinum*, L. Woods; common.
- 852 *P. clandestinum*, L. var. *pedunculatum*, Torr. Common.
- 853 *P. viscidum*, Ell. Dense thickets in Rush Bottom.
- 854 *P. dichotomum*, L. Hills and meadows.
- 855 *P. microcarpum*, Muhl. var. *sphaerocarpon*, Vasey. Common.
- 856 *P. CRUS-GALLI*, L. var. *hispidum*, Vasey. Common.
- 857 *Phalaris arundinacea*, L. Low ground near Lake City.
- 858 *Alopecurus geniculatus*, L. var. *aristulatus*, Vasey. Common.
- 859 *Stipa spartea*, Trin. Prairies; frequent.
- 860 *Muhlenbergia sobolifera*, Trin. Rocky woods.
- 861 *M. sylvatica*, T. & G. Hills; occasional.
- 862 *M. Mexicana*, Trin. Woods; common.
- 863 *M. Mexicana*, Trin. var. *filiformis*, Vasey. Marshes.
- 864 *M. diffusa*, Schreb. Very common in meadows.
- 865 *Sporobolus heterolepis* Gr. Abundant on the prairies.
- 866 *Sporobolus cryptandrus*, Gray. Sandy bottoms.
- 867 *S. vaginæflorus*, Torr. var. *tenera*, Vasey. Dry banks; common.
- 868 *Agrostis scabra*, Willd. Dry fields; common.
- 869 *A. perennans*, Tuck. Moist hillsides.
- 870 *Cinna arundinacea*, L. Woods and ravines; frequent.
- 871 *Deyeuxia confinis*, Nutt. Low boggy places.
- 872 *D. Canadensis*, Beauv. Blue Bottom; rare.

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| 873 <i>Leptochloa mucronata</i> , Kth. Sandy bottoms; scarce. | 890 <i>P. TRIVIALIS</i> , L. Common along streams. |
| 874 <i>Diplachne fascicularis</i> , - Beauv. Sloughs along Little Blue. | 891 <i>P. sylvestris</i> , Gray. Hills; scarce. |
| 875 <i>Phragmites communis</i> , Trin. Sloughs in Rush Bottom. | 892 <i>P. flexuosa</i> , Muhl. Rocky woods along Little Blue. |
| 876 <i>Koeleria cristata</i> , Pers. Abundant on prairies. | 893 <i>Glyceria nervata</i> , Trin. Along streams. |
| 877 <i>Eatonia obtusata</i> , Gray. Hills and fields. | 894 <i>Glyceria fluitans</i> , R. Br. Sloughs along Little Blue. |
| 878 <i>E. Pennsylvanica</i> , Gray. Common in woods. | 895 <i>Festuca nutans</i> , Willd. Rocky woods; common. |
| 879 <i>Eragrostis reptans</i> , Nees. Moist gravelly banks. | 896 <i>F. duriuscula</i> , L. Common on barrens. |
| 880 <i>E. POLEOIDES</i> , Beauv. Common in fields. | 897 <i>Bromus ciliatus</i> , L. var. <i>purgans</i> , Gray. Moist rocks. |
| 881 <i>E. POLEOIDES</i> , Beauv. var. <i>MEGASTACHYA</i> , Gray. Common in fields. | 898 <i>Agropyrum repens</i> , Beauv. Along railroads. |
| 882 <i>E. Frankii</i> , Meyer. Dry ground; common. | 899 <i>Hordeum pusillum</i> , Nutt. Common in dry ground. |
| 883 <i>E. Purshii</i> , Schrad. Common along roadsides. | 900 <i>H. jubatum</i> , L. Cultivated and becoming adventive. |
| 884 <i>E. capillaris</i> , L. Dry open woods. | 901 <i>Elymus Virginicus</i> , L. Rocky woods near Little Blue. |
| 885 <i>E. tenuis</i> , Gray. Sandy ridges in Rush Bottom. | 902 <i>E. Canadensis</i> , L. var. <i>glaucofolius</i> , Gray. Common. |
| 886 <i>E. pectinacea</i> , Mx. var. <i>spectabilis</i> , Gray. Rush Bottom. | 903 <i>Equisetum robustum</i> , Braun. var. <i>affine</i> , Engelm. Bottoms. |
| 887 <i>Poa annua</i> , L. Common in old fields. | 903 <i>Notholæna dealbata</i> , Kunze. Frequent on limestone cliffs. |
| 888 <i>P. compressa</i> , L. Common. | 904 <i>Asplenium parvulum</i> , Mart. & Gal. Hazel thickets; rare. |
| 889 <i>P. serotina</i> , Ehrh. Common in meadows. | 905 <i>Azolla Caroliniana</i> , Willd. Abundant in Hiffner's lake. |

The following have been found within a mile or so of the borders of the county, and may therefore be reasonably supposed to occur in it.

Aphyllon uniflorum, Torr. & Gr.
Heuchera Americana, L.

Sabbatia stellaris, Pursh.
Dodecatheon Meadia, L.

Corrections of Flora of 1882.

- No. 4 should be *Thalictrum purpurascens*.
- No. 8 should be *Ranunculus recurvatus*.
- No. 43 should be *Viola sagittata*.
- No. 132 should be *Prunus serotina*.
- No. 164 should be omitted.
- No. 170 should be *Opuntia Rafinesquii*. This change is made on authority of Dr. Engelmann.
- No. 241 should be *Heliopsis laevis*, var. *scabra*.
- No. 272 should be omitted.
- No. 408 should be *Asclepias Sullivantii*.
- No. 428 should be *Amarantus blitoides*.
- No. 540 should be *Scirpus lineatus*.